

Fanuc Robot Operation and Programming Basics

Using the Teach Pendant

Basic Fanuc robot teach pendant programming

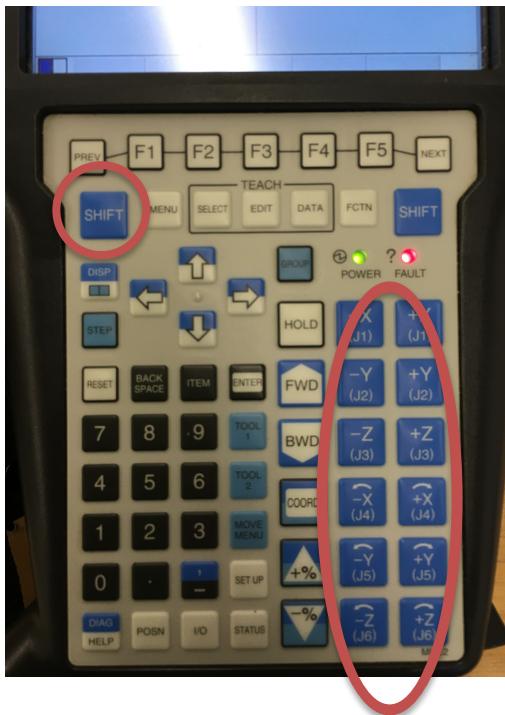
- Make sure that the E-stop on the pendant and controller are off
- In order to move the robot via the teach pendant both the robot controller and the teach pendant needs to be in teach mode (switch pointing to the pointing hand).
- Turn on the main power switch



To move the robot (jogging)

- **Dead man switch:** One of the two yellow dead man switches on the back of the teach pendant needs to be pressed down 1 click and has to be held.
 - The dead man switch has 3 positions:
 1. fully released
 2. middle
 3. fully squeezed
 - The robot will only move if the dead man switch is in the middle (partially squeezed) position. If the dead man switch is fully released or fully squeezed, the robot will not move.
- While holding the dead man switch in the middle position, you also need to hold down the shift button. While the dead man and shift buttons are held, the blue buttons on the right side of the pendant can be pressed to jog the robot.

Buttons used

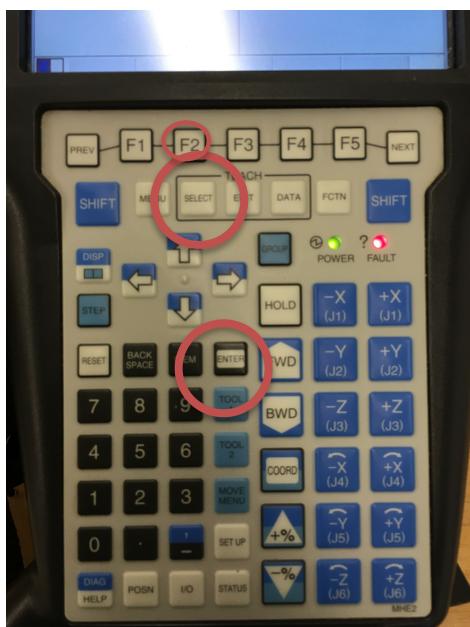


Creating or Running a Program

To find the list of programs/ create a new program

- Press the select button
- Press create button (F2)
- Type a name for your program
- Hit enter twice

Buttons used



Editing a Program

There are two primary ways to edit a program:

1. You can add points to the program one at a time by pressing POINT (F1) on the function menu.
 2. You can add a certain number of lines into your program and later insert or delete lines using the [EDCMD] option (F5) on the function menu.
- Note that you use the NEXT key (to the right of F5) to toggle the function menu between POINT and [EDCMD] when editing a program.

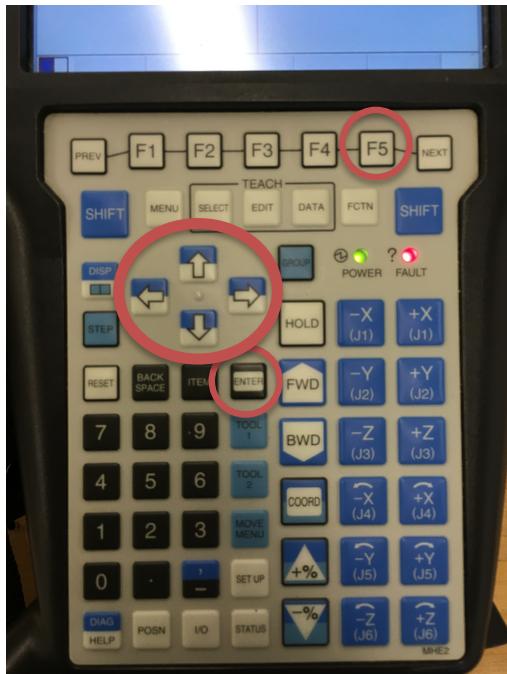
Adding a Point to the Program

- jog to the desired point
- press POINT (F1) to add the point to the program
 - press NEXT if POINT is not visible in the function menu
- choose a joint move to a point J or a linear move to a point L
- point is automatically taught to the current robot location
 - so, jog to the desired point before adding it to the program

To add a new lines to your program

- Press NEXT if [EDCMD] is not visible under F5 on the function menu
- Press [EDCMD] (F5)
- Choose Insert (hit enter)
- Enter number of lines and press enter

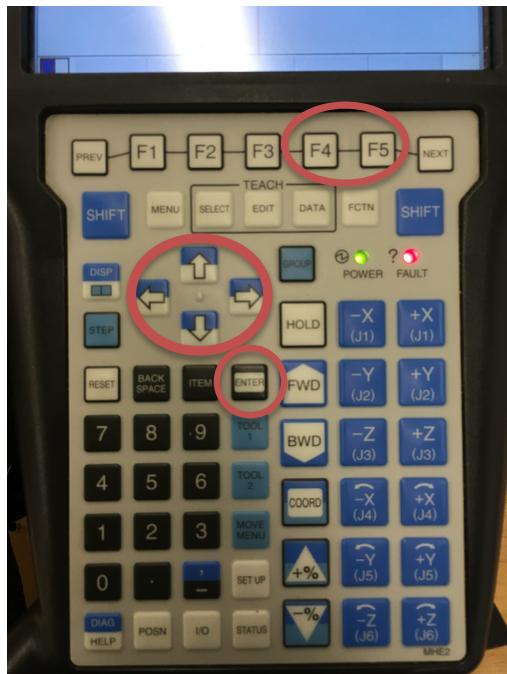
Buttons used



To delete a line

- Highlight line
- [EDCMD]
- scroll to delete and hit enter
- YES (F4) to confirm or NO (F5) to cancel

Buttons used



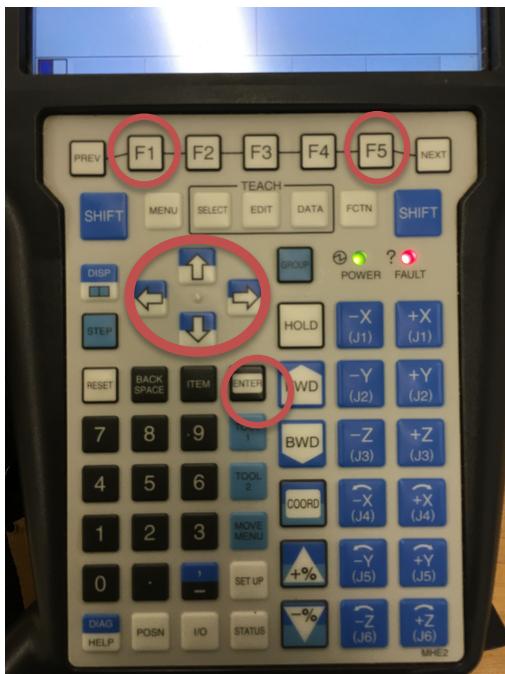
To re-teach a point

- Highlight the line with the point that is to be re-taught
- Move/jog the robot to correct position
- Hold shift and press TOUCHUP (F5)
 - press NEXT if TOUCHUP is not visible in the function menu

To actuate the gripper

- On the blank line hit [INST] (F1)
 - press NEXT if [INST] is not visible in the function menu
- Scroll to I/O hit enter
- Scroll to RO[]=... hit enter
- The line now shows RO[...]=...
- Highlight the first ... and select [LIST]
- Select the Gripper Open or Gripper Close and hit enter
- Choose if you want to the output ON or OFF

Buttons used



To start a program at any line

- Hold both dead man switch and shift
- Press the forward button FWD
- If yellow screen pops up hit enter and repress FWD while holding dead man and shift.
- If program only moves one line hit the step button once.

Buttons used

